

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219
L. Preston Bryant, Jr.

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

DD (804) 698-4021

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David K. Paylor Director

(804) 698-4020 1-800-592-5482

April 28, 2009

Mr. Robert L. Greene, Ph. D. Environmental Compliance Manager Combined Heat and Power, Inc. Rockville Plant 2250 Dabney Road Richmond, Virginia 23230

> Location: Goochland County Registration No: 51201 AIRS ID No: 51-075-00030

Dear Mr. Greene:

Attached is your Title V renewal permit to operate your power generation facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated February 3, 2004.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. <u>Please read all permit conditions carefully.</u>

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on January 14, 2009.

This renewal to operate does not relieve Combined Heat and Power, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality P.O. Box 1105 Richmond, Virginia 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call the regional office at 804-527-5020.

Sincerely,

James E. Kyle, P.E. Air Permit Manager

JEK/HLL/51201TVCover Letter04282009.doc

Attachment: Permit

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Chief, Air Enforcement Branch (3AT13), U.S. EPA, Region III

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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

L. Preston Bryant, Jr.

Secretary of Natural Resources

Mr. Charles J. Packard, President

Facility Name:

Combined Heat & Power, LLC

Rockville Plant

Facility Location:

2361 Lanier Road.

Goochland County, VA

Registration Number: 51201

Permit Number:

PRO-51201

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VII)

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April 28, 2009

Effective Date

April 27, 2014

Expiration Date

Deputy Regional Director

April 28, 2009 Signature Date

Effective Date: 04/28/2009

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I. Facility Information

Permittee

Combined Heat & Power, LLC Rockville Plant 2250 Dabney Rd. Richmond, VA 23230

Responsible Official

Mr. Charles J. Packard President

Facility

Combined Heat & Power, LLC Rockville Plant 2361 Lanier Road Rockville, VA 23146

Contact Person

Mr. Robert L. Greene, PhD Environmental Compliance Manager

Phone: (804) 521-3557 Fax: (804) 521-3583

County ID #: 51-075-0030

Facility Description

NAICS ID# 221119 - Other Electrical Power Generation

SIC Code: 4931-Electrical Power Generation

The facility is a 12 MW power generation facility. Combined Heat & Power, LLC is one of several facilities in the region, which are run by the operating company, INGENCO Distributed Energy. The facility is located in an area in attainment for all pollutants at the time of public notice. The facility is a major source for NO_x and CO emissions. The source's permitted emissions for all pollutants are below PSD applicability levels. The facility is currently permitted under the following permits: A Title V Operating Permit initially issued on April 22, 2004 and a minor NSR significant amendment permit issued on February 3, 2004 which superseded the minor NSR permit issued on May 30, 2000. This permit action pertains to the renewal of the current Title V Operating Permit. An application for permit renewal was received on February 12, 2008 by DEQ and was deemed administratively complete on February 14, 2008.

Combined Heat & Power, LLC Permit Number: PRO-51201

ermit Number: PRO-51201 Effective Date: 04/28/2009 Page 5

II. Emission Unit and Control Device Identification

Equipment to be operated consists of:

Emission Unit	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	PCD Pollutant ID Controlled	Applicable Permit Date
E1-E16	S-1	350 kW Generators	Each engine is rated at	NA- air-to-fuel ratio control, turbo-	1		02/03/2004
	S-3 S-4	(1-N dhoin in 01)	Detroit Diesel Model 6063-GK 60.	chaging, custom built after coolers and charge-air cooling systems in use on engines.		PM, PM 10, PCBs.	
E17-E40	S-S	350 kW Generators (24 in Group R-2)	Each engine is rated at	NA- air-to-fuel ratio control, turbo-	ı	NO. CO.	02/03/2004
	S-6		3.1 MMBtu/hour input,	charging, custom built after coolers		SOx, VOCs,	
	S-7		Detroit Diesel Model	and charge-air cooling systems in use		PM, PM 10,	
	×->		6063-GK 60.	on engines.		PCR	~ .

*The Size/Rated capacity and PCD efficiency are provided for informational purposes only, and are not applicable requirements.

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III. Fuel Burning Equipment Requirements – (Emission Units E1-E40)

A. Limitations

- 1. Nitrogen Dioxide emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by custom-built dry after-coolers and good combustion practices. The forty Detroit Diesel Model 6063-GK 60 internal combustion engines shall be provided with adequate access for inspection.

 (9 VAC 5-50-260 and Condition No. 3 of the minor NSR permit dated 2/3/2004)
- 2. Sulfur Dioxide emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by the use of low-sulfur fuel. (9 VAC 5-50-260 and Condition No. 4 of the minor NSR permit dated 2/3/2004)
- 3. Carbon Monoxide, particulate matter and volatile organic compound emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be controlled by proper engine maintenance practices. The engines shall be repaired and maintained to prevent excess emissions of carbon monoxide, particulate matter and volatile organic compounds. Any change to the combustion control processes associated with the forty Detroit Diesel Model 6063-GK 60 internal combustion engines may require a permit to modify and operate.

 (9 VAC 5-50-260 and Condition No. 5 of the minor NSR permit dated 2/3/2004)
- The charge air temperature measured at the inlet to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed an hourly average of 150 °F.
 (9 VAC 5-50-260 and Condition No. 6 of the minor NSR permit dated 2/3/2004)
- The R1 group (E1-16) and R2 group (E17-40) Detroit Diesel Model 6063-GK 60 internal combustion engine stacks shall be a minimum of 40 feet and 26 feet above ground level, respectively. The stacks shall not be lowered for any reason without prior written approval of the Director, Piedmont Region.
 (9 VAC 5-80-1120 C, 9 VAC 5-80-1180 and Condition No. 9 of the minor NSR permit dated 2/3/200)
- 6. The approved fuels for the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) are distillate fuel oil, No. 4 fuel oil and mineral oil dielectric fluid (MODEF). A change in the fuel may require a permit to modify and operate. (9 VAC 5-80-1180 and Condition No. 10 of the minor NSR permit dated 2/3/2004)

7. The fuel shall meet the specifications below:
DISTILLATE OIL which meets the American Society for
Testing and Materials (ASTM) [D396] specifications for number 2 fuel
oil, RESIDUAL OIL which meets the ASTM [D396] specifications for number 4 fuel
oil, and MODEF:

Sulfur content:

Maximum sulfur content per shipment: 0.5% by weight

Average annual sulfur content, calculated monthly as the sum of each

consecutive 12-month period: 0.2% by weight

Heat content:

DISTILLATE OIL:137,000 BTU/gallon RESIDUAL OIL:144,000 BTU/gallon

MODEF: 145,000 BTU/gallon

(9 VAC 5-80-1180 and Condition No. 11 of the minor NSR permit dated 2/3/2004)

8. Contaminants contained in the MODEF burned in the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed the limits specified below:

PCB content: 49 ppm by weight Lead content: 25 ppm by weight Flash Point: 100 °F, minimum

(9 VAC 5-80-1180 and Condition No. 12 of the minor NSR permit dated 2/3/2004)

- The Total Heat Input (HI_{TOTAL}) to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed 208,696 MMBtu/yr, calculated monthly as the sum of each consecutive 12-month period.
 (9 VAC 5-80-1180 and Condition No. 13 of the minor NSR permit dated 2/3/2004)
- 10. The HI_{TOTAL} to the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be calculated on a monthly basis using the following equation:

$$HI_{TOTAL\,(MMBfu)} = \frac{(Gal_{No.2} \ x \ HV_{MODEF}) + (Gal_{No.2} \ x \ HV_{No.2}) + (Gal_{No.4} \ x \ HV_{No.4})}{1,000,000 \ Btu/MMBtu}$$

Where Gal_X is the monthly throughput in gallons for fuel type X and HV_X is the Heating Value for that fuel type found in Section III.A.7.

(9 VAC 5-80-1180 and Condition No. 14 of the minor NSR permit dated 2/3/2004)

- 11. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil or residual oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the oil was received;
 - c. The volume of oil delivered in the shipment;
 - d. A statement that the distillate oil complies with the ASTM specifications [D396-78] for number 2 fuel oil or number 4 fuel oil, respectively, and
 - e. The sulfur content of the oil

(9 VAC 5-170-160 and Condition No. 15 of the minor NSR permit dated 2/3/2004)

- 12. The permittee shall analyze a composite sample of the MODEF monthly to verify the limits in Section III.A.7 and III.A.8. The permittee shall maintain records of all oil analyses and of all oil shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five years. (9 VAC 5-170-160 and Condition No. 16 of the minor NSR permit dated 2/3/2004)
- 13. Emissions from the operation of the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be calculated using the formulas below:

For PM/PM10, NOx, CO and VOC -

$$PollutantEmissions(tons/yr) = \frac{H \frac{MMBtu/yrx\ PollutantEmissionFactor(lbs/MMBtu)}{2000lbs/ton}$$

Where HI_{TOTAL} is calculated according to Condition 14 and the Emission Factor is taken from Condition 14.

For SO2 -

SO₂ Emissions (tons/yr) =
$$\frac{1.01 \text{ lbs/MMBtu x \% Sulfur in fuel x HITOTAL}}{2000 \text{ lbs/ton}}$$

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Where HI_{TOTAL} is calculated according to Section III.A.10 and the % sulfur in the fuel is the average annual value as derived from fuel certification forms as required by Section III.A..11 (for distillate and residual oil) or analyses as required by Section III.A.12 (for MODEF).

(9 VAC 5-50-260, 9 VAC 5-50-180 and Condition No. 17 of the minor NSR permit dated 2/3/2004)

14. Emissions from the operation of each of the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall not exceed the limits specified below:

Particulate Matter	0.1	lb/MMBtu
PM-10	0.1	lb/MMBtu
Sulfur Dioxide	0.5	lb/MMBtu
Nitrogen Dioxide	2.3	lb/MMBtu
Carbon Monoxide	0.25	lb/MMBtu
Volatile Organic Compound	ls 0.1	lb/MMBtu

Compliance with the lb/MMBtu limits for PM, PM-10, NOx, CO and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Sections III.A.1, III.A.2, III.A.3, III.A.7, III.A.8, III.B.1, and III.B.2.

(9 VAC 5-50-260 and 9 VAC 5-50-180 and Condition No. 18 of the minor NSR permit dated 2/3/2004)

B. Monitoring

A Section 1

1. The forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) shall be equipped with devices to continuously measure the charge air temperature at the air inlet to the engine. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating. A change in the location of the temperature indicator may require a permit to modify and operate.

(9 VAC 5-80-1180, 9 VAC 5-50-20, 9 VAC 5-50-260 and Condition No. 7 of the minor NSR permit dated 2/3/2004)

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- 2. The monitoring devices used to continuously measure the inlet charge air temperature of the engines shall be observed by the permittee with a frequency of not less than hourly. The permittee shall keep a log of the observations from the monitoring device.
 - (9 VAC 5-50-50 F and Condition No. 8 of the minor NSR permit dated 2/3/2004)
- 3. Once per month, the facility shall conduct an observation of the presence of visible emissions from the operating 40 internal combustion engines. If visible emissions are observed, the facility shall take timely corrective action such that the units resume operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any of the 40 internal combustion engines does not exceed 10% opacity whenever the engines are operated in a single fuel mode, except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity and visible emissions from the 40 dual-fuel diesel engines stacks (S1-S8) shall not exceed 20% opacity whenever the engines are operated in a dual fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 30.0% opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observation exceeds 10% opacity, the VEE shall be conducted for sixty minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the operating engines resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, single or dual fuel operations, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the DEQ, the facility shall conduct additional visible emission evaluations from the 40 internal combustion engines to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.

(9 VAC 5-170-160, 9 VAC 5-50-30 G, 9 VAC 5-50-50 and 9 VAC 5-50-410)

C. Recordkeeping

The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

- a. Monthly and annual fuel throughputs, in gallons.
- b. Monthly and annual heat input to the engines in MMBtu.
- c. Monthly and annual pollutant emissions records calculated monthly using the heating values in Section III.A.7. Sulfur dioxide emissions shall be calculated

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using the emission factors in Section III.A.14, or emission factors approved by the Piedmont Regional Office.

- d. Hourly inlet charge air temperature indicator readings from each operating engine.
- e. Training records for employees responsible for operating the Detroit Diesel Model 6063-GK 60 internal combustion engines.
- f. All fuel supplier certifications and fuel analyses records.
- g. Operating procedures, maintenance schedules, and service records for all Detroit Diesel Model 6063-GK60 internal combustion engines, as well as temperature gauges measuring charge air inlet temperatures.
- h. Records for scheduled and unscheduled maintenance for all process equipment and temperature monitoring devices, including annual certifications of accuracy for those devices.
- i. Results of all stack tests, visible emissions evaluations and performance evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-50-50 and Condition No. 25 of the minor NSR permit dated 2/3/2004)

D. Testing

1. An initial performance test shall be conducted for Nitrogen Dioxide and Carbon Monoxide from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) within 60 days of the Piedmont Regional Office receiving notice of the combustion of #4 residual oil to determine compliance with the emission limits contained in Sections III.A.14 and IV.A.1. The test shall be performed while operating using 100% residual oil. The test shall be performed at no less than 90% of the rated capacity of the electrical output, on a minimum of one set of four engines. The test shall be performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the test are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days

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after test completion and shall conform to the test report format enclosed with this permit.

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(9 VAC 5-50-20, 9 VAC 5-50-30, 9 VAC 5-50-410, VAC 5-80-1200 and Condition No. 21 of the minor NSR permit dated 2/3/2004)

- 2. Upon request by the DEQ, the permittee shall conduct additional performance tests for Nitrogen Dioxide from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region. (9 VAC 5-50-30 G and Condition No. 23 of the minor NSR permit dated 2/3/2004)
- 3. Concurrently with the initial performance tests, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Piedmont Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test results shall be submitted to the Director, Piedmont Region within 60 days of start-up and shall conform to the test report format enclosed with this permit. (9 VAC 5-50-30 G, 9 VAC 5-80-1200 and Condition No. 22 of the minor NSR permit
 - (9 VAC 5-50-30 G, 9 VAC 5-80-1200 and Condition No. 22 of the minor NSR permit dated 2/3/2004)
- 4. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.
 - (9 VAC 5-50-30 G and Condition No. 24 of the minor NSR permit dated 2/3/2004)
- 5. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested.

 (9 VAC 5-50-30 F and Condition No. 26 of the minor NSR permit dated 2/3/2004)

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- 6. The performance tests required in Section III.D.1, of this section, shall at a minimum be conducted once every five years on all eight stacks and before the operating permit renewal application for NOx and CO, starting from the completion date of the testing as required in Section III.D.1. Each testing cycle shall evaluate the performance of a different set of four engines (stack) to ensure the accuracy of the equations in the Section III.A.13. The test shall be performed at no less than 90% of the rated capacity of the electrical output on a minimum of one set of four engines. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-1200)]
- 7. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
VOC/ NMOC	EPA Method 18 or 25A/25C	
NOx	EPA Method 7E	
SO2	EPA Method 6C	
со	EPA Method 10	
PM/PM10	EPA Methods 5, 17	
Visible Emission	EPA Method 9	

(9 VAC 5-80-110)

E. Reporting

1. The permittee shall furnish notification to the Director, Piedmont Region of the intention to shut down, bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

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- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B and Condition No. 28 of the minor NSR permit dated 2/3/2004)

2. The permittee shall furnish notification to the Director, Piedmont Region, of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours of the malfunction. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the occurrence. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Director, Piedmont Region, in writing.

(9 VAC 5-20-180 C and Condition No. 29 of the minor NSR permit dated 2/3/2004)

IV. Facility Wide Conditions

A. Limitations

Visible emissions from the forty Detroit Diesel Model 6063-GK 60 internal combustion engines (E1-40) stacks shall not exceed 10.0% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
 (9 VAC 5-50-80, 9 VAC 5-50-260 and Condition No. 20 of the minor NSR permit dated 2/3/2004)

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2. Total emissions from the facility shall not exceed the limits specified below:

Particulate Matter	13.0	lbs/hr	11.0	tons/yr
PM-10	13.0	lbs/hr	11.0	tons/yr
Sulfur Dioxide	65.0	lbs/hr	22.0	tons/yr
Nitrogen Dioxide	295.0	lbs/hr	240.0	tons/yr
Carbon Monoxide	32.0	lbs/hr	27.0	tons/yr
Volatile Organic Compounds	13.0	lbs/hr	11.0	tons/yr
Polychlorinated biphenyls (Aroclors)	0.4	lbs/hr	0.3	tons/yr
Lead	0.2	lbs/hr	0.2	tons/yr

Compliance with the lb/hr limits for PM, PM10, NOx, CO and VOC may be determined by additional stack testing or other appropriate means upon request of the Department. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of the emission limits. Compliance with these emission limits may be determined as stated in Sections III.A.1, III.A.2, III.A.3, III.A.5, III.A.6, III.A.9, III.A.10, III.B.1 and III.B.2.

(9 VAC 5-50-260 and 9 VAC 5-50-180 and Condition No. 19 of the minor NSR permit dated 2/3/2004)

V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T41	Fuel oil storage tank	5-80-720 B.	VOC	15,000 Gallon
T42	Fuel oil storage tank	5-80-720 B.	voc	15,000 Gallon
T43	Fuel oil storage tank	5-80-720 B.	voc	10,000 Gallon
T44	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T45	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T46	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon

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Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T47	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T48	Fuel oil storage tank	5-80-720 B.	voc	20,700 Gallon
T49	Fuel oil storage tank	5-80-720 B.	voc	20,700 Gallon
T50	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T51	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T52	Fuel oil storage tank	5-80-720 B.	voc	20,700 Gallon
T53	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T54	Fuel oil storage tank	5-80-720 B.	voc	31,000 Gallon
T55	Fuel oil storage tank	5-80-720 B.	voc	31,000 Gallon
T56	Fuel oil storage tank	5-80-720 B.	voc	31,000 Gallon

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
No applicable requirements identified.	-	-

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Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

VII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield

granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

116.71

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

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- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

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- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 7. The status of compliance with the terms and conditions of this permit for the certification period.
- 8. Such other facts as the permit may require to determine the compliance status of the source. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U.S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-

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40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

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L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

 (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

 (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

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- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario.

The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

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S. Permit Availability

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Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

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- d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)